

## ANDREA RADIO CORP. Model P-163, Three-Way, Three-Band Portable.

I.F. ALIGNMENT Set signal generator to 455 KC. Turn band selector switch of receiver to band 1. Connect high side of generator through a .1 mfd. condenser to stator side of antenna section of gang condenser. Ground side of generator to chassis. Connect a 0-1 volt copper oxide rectifier meter across voice coil of speaker. Align two trimmers on top of each I.F. transformer for maximum output. This completes the I.F. alignment.

R.F. ALIGNMENT Connect copper oxide type rectifier meter across speaker voice coil. Connect high side of generator through a 200 mmf. condenser to antenna post "A" on loop. Ground side of generator to chassis. Set generator to 1500 KC, the dial pointer to 1500 KC, Band switch to Band 1, and adjust Band 1. Adjust band 1 antenna shunt trimmer on loop (see location on diagram). Set signal generator at 600 KC and dial pointer on set at 600 KC. Adjust band 1 series oscillator trimmer (see diagram for location) for maximum output. While this adjustment is being made, rotate the tuning control slightly back and forth for each small adjustment of the oscillator condenser, otherwise the alignment will not be accurate. Set the signal generator back to 1500 KC and retouch antenna shunt trimmer band 1. This completes band 1 alignment.

BAND 2 ALIGNMENT Replace 200 mmf. condenser with 400 ohm resistor. Set signal generator to 6.0 megacycles and dial to 6.0 mc. Turn waveband switch to band 2.

Adjust Band 2 oscillator shunt trimmer for maximum output.  
Adjust Band 2 antenna shunt trimmer on loop at 6.0 mc. for maximum output.

BAND 3 ALIGNMENT Set signal generator 18 mc. and dial to 18 mc. Turn band switch to Band 3. Use 400 ohm antenna dummy. Adjust Band 3 oscillator shunt trimmer for maximum output, noting that the setting is not the image frequency.

Adjust Band 3 antenna shunt trimmer on loop for maximum output. During this adjustment, rotate the gang condenser back and forth slowly for each trimmer setting or poor alignment will result. After alignment, check to see that the setting is not on the image frequency.